

Table S1. Summary of quantitation of the timing of signals and morphology during macropinosome formation

	1	2	3	4	5	6	7	8	9	10	Average	STDEV
Signal survey (10 standard)												
peak of Rac1-FRET	20	20	20	20	60	20	40	40	40	20	30	14.14
peak of BtkPH-Ratio	20	40	60	20	20	20	20	20	20	20	26	14
peak of Rab5a-Ratio	120	80	160	80	100	180	140	180	100	80	122	40.5
peak of 2xFYVE-Ratio	180	80	180	80	120	100	300	200	280	80	160	82.19
CFP-MEM experiment (4 standard+6)												
peak of CFP-MEM	100	<u>100</u>	100	<u>100</u>	<u>80</u>	20	<u>80</u>	80	<u>120</u>	<u>100</u>	88	27
beginning of motile	120	<u>160</u>	160	<u>120</u>	<u>120</u>	100	<u>100</u>	200	<u>160</u>	<u>180</u>	142	34.58
FM4-64 experiment (5standard+5)												
peak of FM4-64	<u>160</u>	<u>100</u>	<u>100</u>	20	<u>100</u>	100	<u>100</u>	40	60	40	82	41.58
beginning of motile	<u>340</u>	<u>180</u>	<u>180</u>	60	<u>140</u>	280	<u>220</u>	80	160	160	180	84.33
(t=0 is end of curved)												

Each value represents a separate experiment. Cup closure measurements (CFP-MEM experiment and FM4-64 experiment) were taken from a mixture of standard (60 second curved, 1.2-2.2 mm diameter) and non-standard (underlined) macropinosomes. Times are relative to ruffle closure (i.e. end of curved stage)